

SCTE CABLE-TEC
EXPO'13
OCTOBER 21-24 / ATLANTA, GA

**JUMPING ON THE RIGHT HEVC TRAIN –
PRAGMATIC MIGRATION STRATEGIES TO THE NEW
COMPRESSION STANDARD**

Yaron Raz

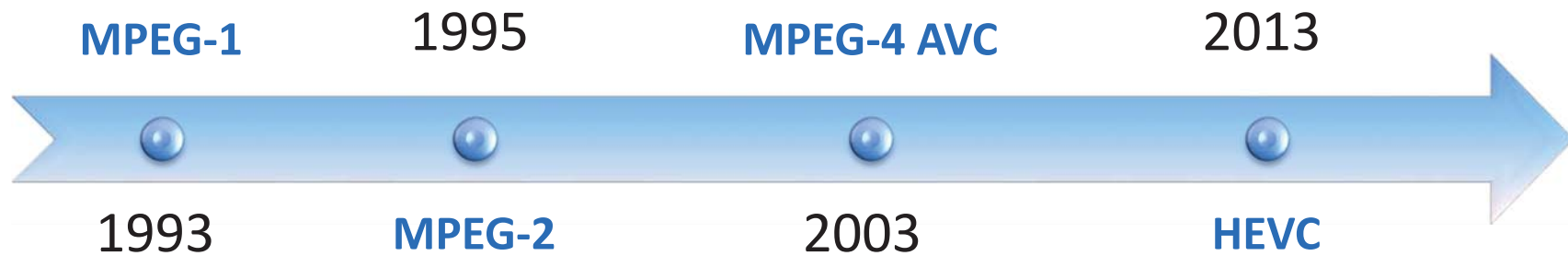
Director, Video Solutions Marketing

Harmonic

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MPEG Compression Standard Evolution



Efficiency Goal – 50% better than AVC/H.264 High Profile



Benefits of HEVC to Cable Operators

QAM Spectrum

DOCSIS capacity

Storage for VOD, Time-Shift TV, nDVR

CDN

IP backbone

Improved quality



HEVC Applications for Cable Operators

Second-screen ABR delivery

IP STB video delivery

QAM STB video delivery

Ultra-HD video

Video outside the home



Multiscreen ABR Video

- ▶ Many devices can support SW-decoding while maintaining reasonable battery life
- ▶ Concurrency for 2nd screen is still <5% but picking up
- ▶ Connected TVs will make the difference
- ▶ IP STBs to use ABR as well

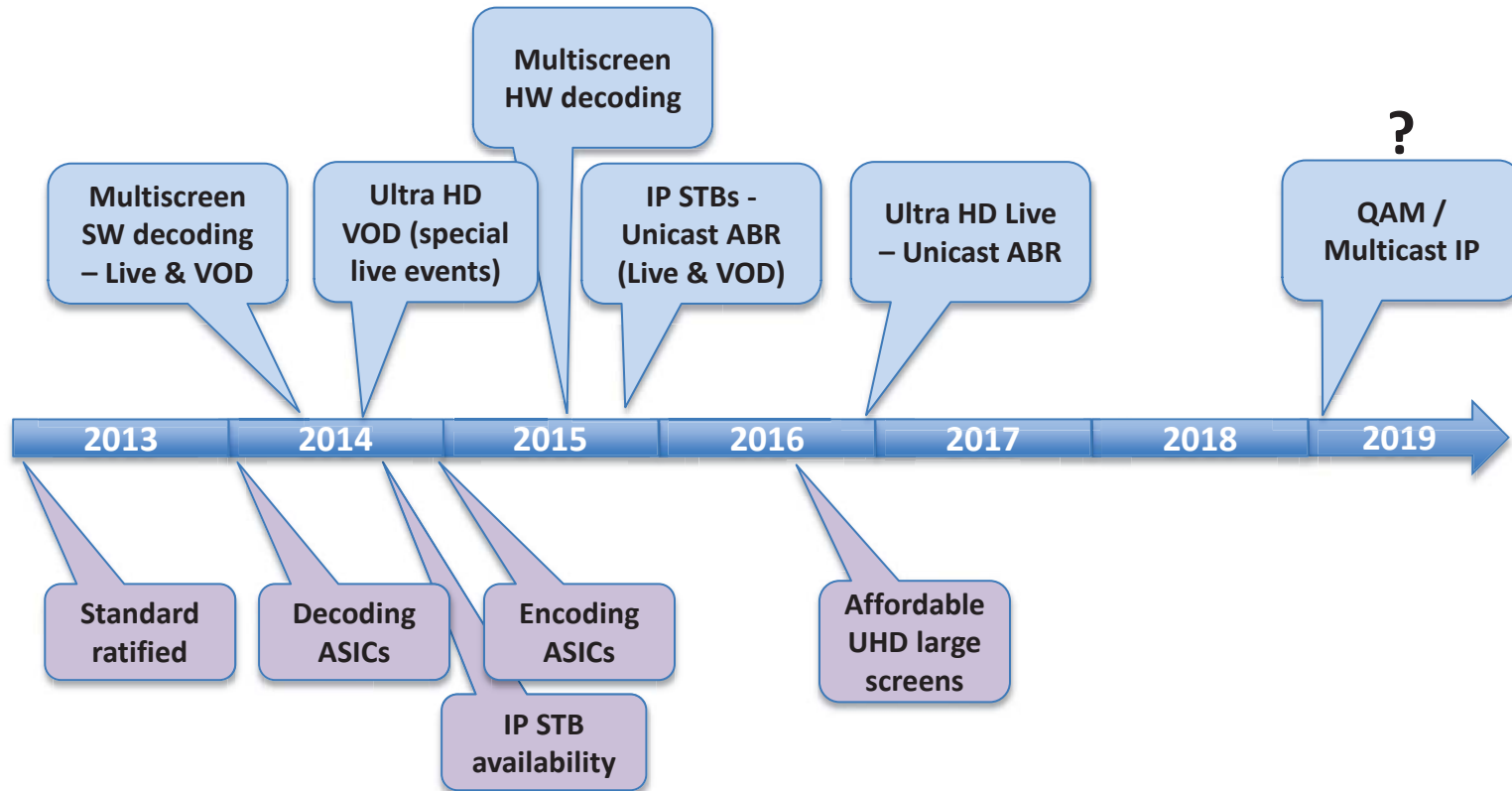


Ultra HD

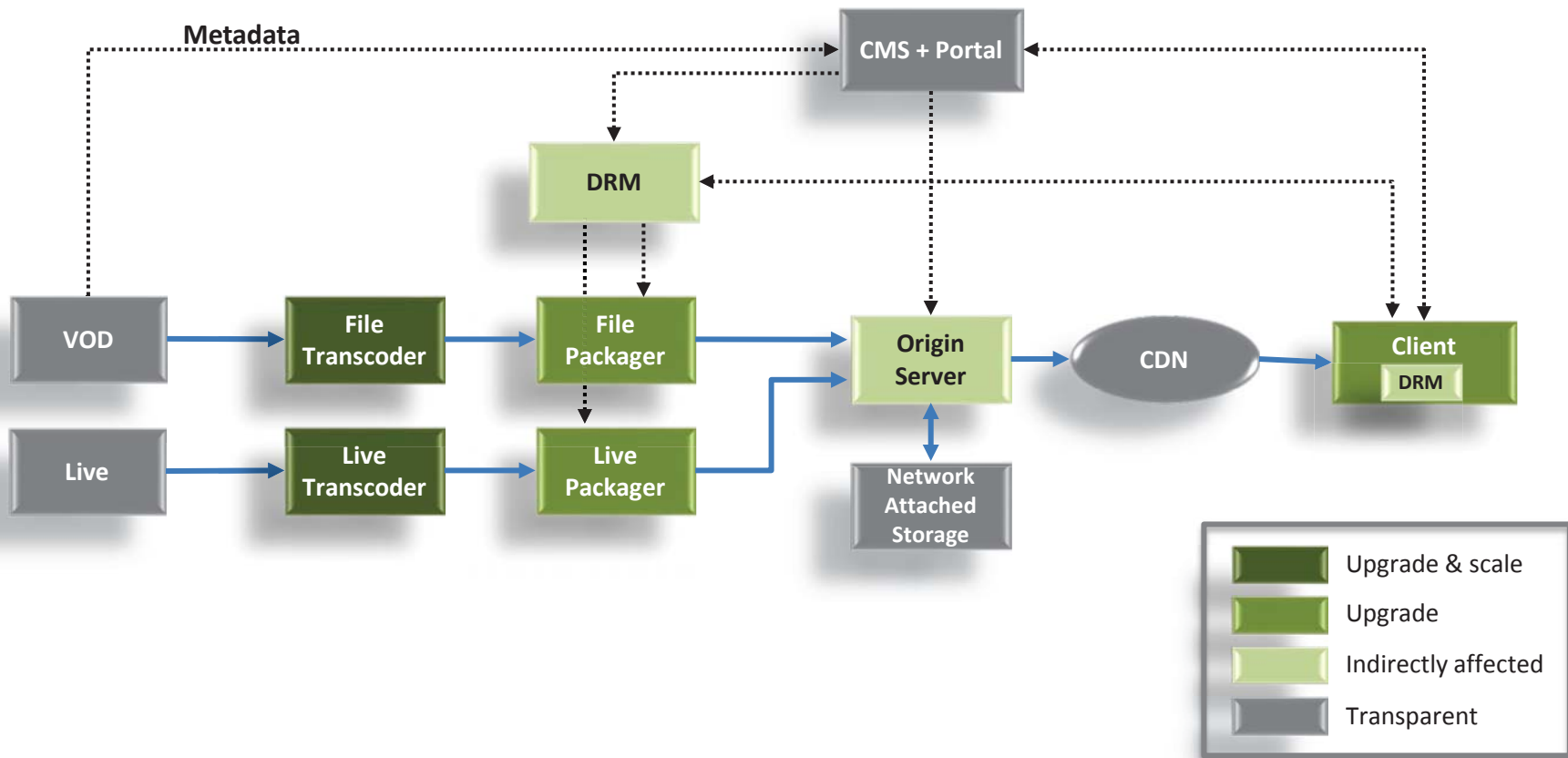
- ▶ Will likely leverage HEVC from day 1
- ▶ ~14Mb per service vs. ~28Mb with AVC
- ▶ VOD can leverage existing cinematic content
- ▶ Live will take more time
- ▶ No legacy installed base



HEVC - Projected Migration Timeline



ABR Migration to HEVC



Preparing for HEVC migration

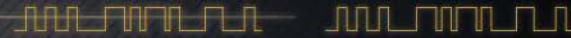
- ▶ Software based transcoding
 - Leveraging COTF IT infrastructure
 - Upgradeable to support HEVC...
 - ...But HEVC will take 10x the compute resources
- ▶ Simple software upgrade for packagers
- ▶ May need to add DASH protocol



Summary

- ▶ 50% efficiency gains is real and beneficial
- ▶ Migration will be much faster than AVC
 - Predominantly utilizing IP ABR
 - No Simulcast vs. swap-out challenge
 - Software decoder availability on installed base
- ▶ Deployments will start as early as 2014
 - Multiscreen
 - Ultra HD VOD
- ▶ Future-proof your infrastructure investment today





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